



# CITY OF COSTA MESA

CALIFORNIA 92628-1200

P.O. BOX 1200

FROM THE OFFICE OF THE TRANSPORTATION SERVICES MANAGER

## **GUIDELINES FOR STUDY OF INSTALLATION OR REMOVAL OF SPEED HUMPS**

The City of Costa Mesa has determined that the use of speed humps is appropriate in areas where other methods have failed and a true public hazard exists, and the use of speed humps should be limited only to this type of situation and not as a first-level traffic control device.

### **1. Candidate streets shall meet the following requirements:**

- a) Streets must not be more than one lane in each direction.
- b) Streets must not be Master Plan designated higher than a commuter on City of Costa Mesa or Orange County Master Plan of Arterial Highways.
- c) Streets must not be on a street segment adjacent to an emergency response station (police or fire station).
- d) Streets must not be on an established Orange County Transit District Route.
- e) Streets must be in a "residence district." A residence district as defined in the California Vehicle Code is an area with contiguous property on both sides of the street consisting of sixteen (16) or more separate dwelling houses or business structures per one-quarter mile (or ratio thereof), with not less than 51 percent of the structures occupied by residents.
- f) The posted or prima facie speed limit shall be no greater than 25 miles per hour (MPH).
- g) The 85th percentile speed of traffic must be equal to or greater than 30 miles per hour (MPH).
- h) The average daily traffic volume must be equal to or greater than 3,500 vehicles, total in both directions, in a 24-hour period, on an average weekday.

- i) Street geometry must provide at least 200 feet of clear visibility on approaches to speed humps, with humps located not less than 200 feet or more than 450 feet apart; must provide hump locations at least 200 feet away from intersections and sharp horizontal curves; must provide roadway grades of less than five percent at hump locations; must provide raised curbs to physically discourage motorists from driving off the street to avoid the speed humps; and must not have utility manholes, fire hydrants, or driveways at hump locations.
- j) Speed humps are not recommended in those communities where the roadway system is of a grid pattern where paralleling streets may be used by traffic as an alternate route to avoid the street with speed humps.
- k) Use of speed humps should not be interrupted within a segment unless a distinct change occurs in terms of roadway designation, speed limit, number of lanes, and other geometrics and roadway characteristics.
- l) The City of Costa Mesa's Fire and Police Departments will be consulted on candidate streets for speed hump installations.
- m) At least 50 percent of households (one signature per household) within 75 feet of face of curb along a "qualifying street segment" (i.e., two-lane street with a ratio of at least sixteen (16) separate structures per one-quarter mile, of which 51 percent must be occupied by residents; with segments identified by Transportation Services Manager on basis of through traffic patterns) must sign a petition to install or to remove speed humps.

**2. Standards for speed hump installation:**

- a) In profile view - generally circular, 12 feet in length and with a mean height at its midpoint of 3.5 inches, with an allowable tolerance of  $\pm 0.5$  inch.
- b) In plan view - across the street to a point near the edge of the travelway with the last 1 to 3 feet tapered so that it is flush with the roadway at the joint with the gutter.

- c) Advance warning signs and pavement legends to note "Bump Ahead" and advisory speed of 15 miles per hour (MPH) a minimum of 100 feet in advance of each hump on each side of the street; double yellow centerline in vicinity of speed hump; raised pavement markers to delineate the roadway centerline over the hump; and vertical pavement markings on the speed hump (parallel to direction of travel) to illustrate the raise in pavement.

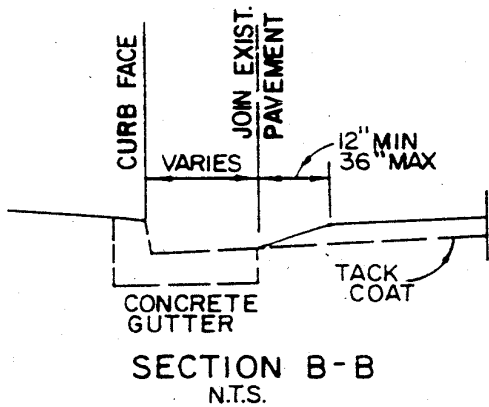
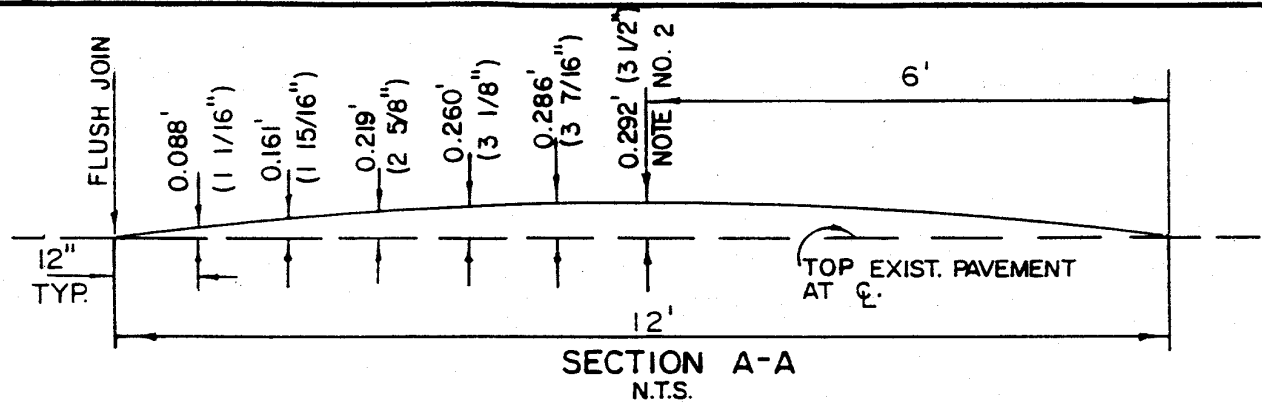
### 3. Review and Removal Procedures

- a) Twelve months after installation of speed humps a review of traffic conditions will be conducted. The findings of this review will be reported to the Transportation Commission and may be utilized to evaluate the performance of the speed humps and to aid in refining qualifications for the installation guidelines.
- b) After the initial twelve-month review, those streets that have been furnished with speed humps will be included in the City's biannual traffic volume survey. Accident history will also be reviewed biannually. No other related data gathering will be performed unless the initial findings indicate the need for further study.
- c) Removal of speed humps will not be considered until the completion of the initial twelve-month review. After the twelve-month review, requests for removal must be supported by a petition as identified in Item 1.m.; or be recommended by staff based upon unusual or adverse traffic conditions; or upon the completion of improvements to the City's arterial street system that would reduce the usage of the subject street to levels below that required to qualify by these guidelines.
- d) If removal is requested by petition of the residents of the street segment, and a subsequent request for reinstallation is received, it shall be processed in accordance with these guidelines. The cost of reinstallation shall be borne by the petitioners if said request is made within five years from the date of removal.

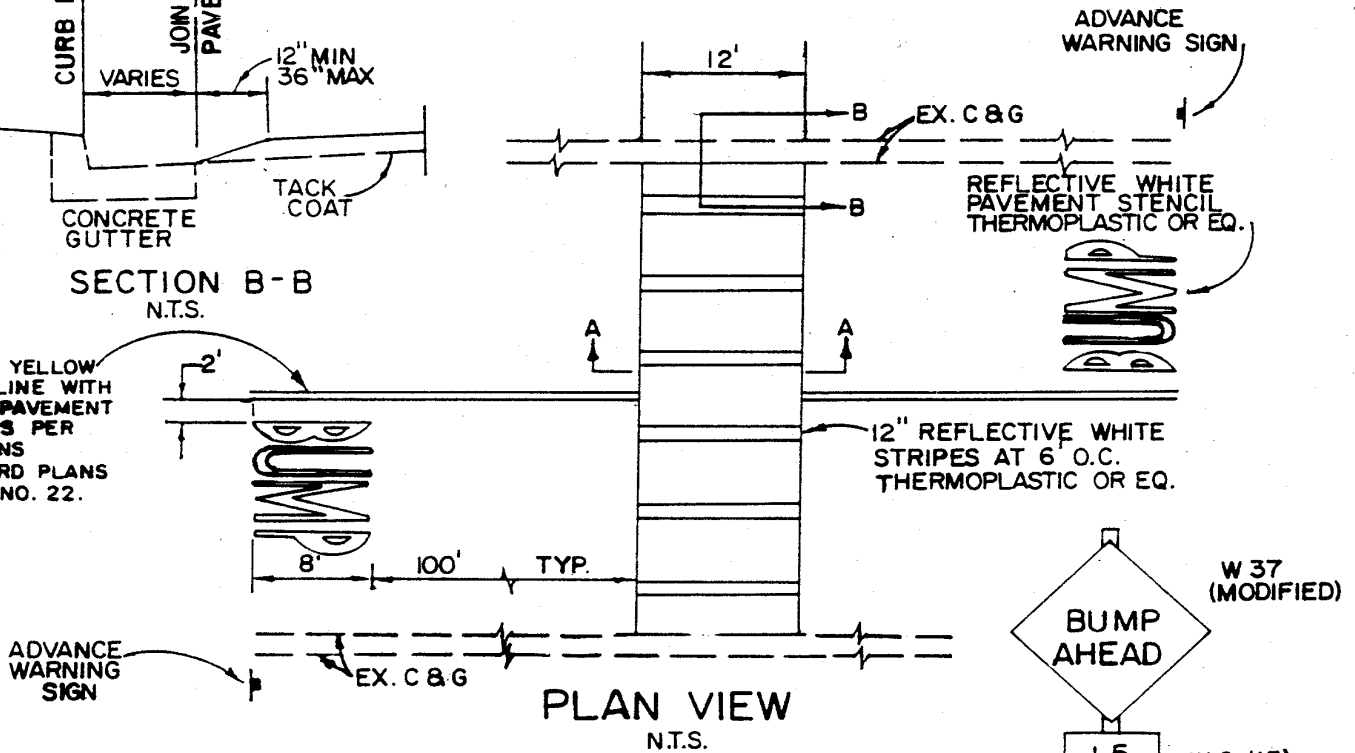
### 4. Administrative Procedures

- a) Upon receipt of a request in writing from a resident of the street for a petition for speed humps, the Transportation Services Manager shall identify the qualifying street segment for which the installation of speed humps will be considered and for which the petition must be circulated.

- b) The petition for installation or removal shall specifically describe the qualifying street segment required to be included and shall contain the following statement at the top of each page: By signing this petition, I hereby accept speed humps and associated advance warning devices, accept possible increases in noise and air pollution emissions associated with speed humps due to additional vehicle braking and accelerating at each speed hump, and accept restricted on-street parking in the vicinity of speed humps if a high rate of traffic accidents involving parked vehicles is documented. The petition circular's name(s), address and phone number shall be provided on each page of the petition.
- c) A separate petition shall be used for each street or street segment.
- d) Upon receipt of a qualifying petition staff will then undertake the appropriate traffic studies to determine whether the street meets the minimum requirements. If the minimum requirements are met, the petition and the resultant traffic studies will then be presented to the Transportation Commission for their consideration at a public hearing.
- e) Should the petitioners' request for speed humps be denied for any reason, no reconsideration of any subsequent petition shall be accepted for the same street for a minimum of twelve months.

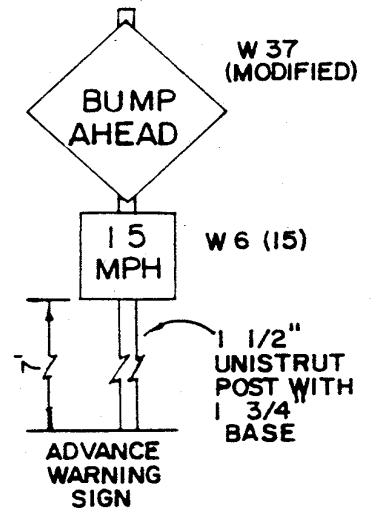


DOUBLE YELLOW CENTERLINE WITH RAISED PAVEMENT MARKERS PER CALTRANS STANDARD PLANS DETAIL NO. 22.



NOTES:

1. SPEED HUMPS SHALL BE LOCATED BY THE ENGINEER, AND/OR AS SHOWN ON PLAN.
2. SPEED HUMP SHALL BE CONSTRUCTED TO A HEIGHT OF 0.292' (3.5") PLUS OR MINUS 0.031' (0.375") AT THE MIDPOINT. THE CORRESPONDING SHAPE SHALL FOLLOW A CIRCULAR ARC (SEE SECTION A-A).
3. PLACEMENT OF ASPHALT TO BE IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION INCLUDING SUPPLEMENTS.
4. ASPHALT SHALL BE TYPE III-C3-AR4000 (1/2") OR AS DIRECTED BY THE ENGINEER WITH 6% ASPHALT BINDER.



CITY OF COSTA MESA  
CALIFORNIA

PUBLIC SERVICES DEPARTMENT

SPEED HUMP DETAILS

APPROVED *Tullain J. Morin* DATE 10/1/91

DRAWN J.W.  
SCALE NONE  
STD. DRWG. NO.